



Unified International Cyber Olympiad

UNIFIED INTERNATIONAL CYBER OLYMPIAD

CLASS - 6

Question Paper Code : 3P114

KEY

1. C	2. A	3. A	4. B	5. C	6. A	7. A	8. A	9. B	10. D
11. B	12. B	13. C	14. A	15. D	16. C	17. D	18. C	19. B	20. B
21. A	22. B	23. C	24. C	25. C	26. A	27. C	28. A	29. A	30. B
31. C	32. C	33. C	34. B	35. A	36. C	37. B	38. C	39. B	40. A
41. B	42. B	43. B	44. B	45. A	46. D	47. B	48. A	49. C	50. A,D

SOLUTIONS

MENTAL ABILITY

01. (C) Given $95 + 96 + 97 + \dots + 200 = 15635$
 $95 + 96 + 97 + 98 + 99 + 100 + 101 + 102 + \dots + 200 = 15,635$
 $585 + 101 + 102 + 103 + \dots + 200 = 15635$
 $\therefore 101 + 102 + 103 + \dots + 200 = 15635 - 585$
 $101 + 102 + 103 + \dots + 200 = 15,050$
 $\therefore 10 + 11 + 12 + \dots + 100 + 101 + 102 + \dots + 200 = 500 + 15,050 + 20,055$
02. (A) Volume of Q = $\frac{1}{2}P = \frac{1}{2} \times 1 \text{ l } 250 \text{ ml}$
 $= 625 \text{ ml}$

- Volume of R = $\frac{2}{5}$ of Q = $\frac{2}{5} \times 625 \text{ ml}$
 $= 250 \text{ ml}$
03. (A) 7 iron balls weight = $7 \times 560 \text{ g} = 3.92 \text{ kg}$
Mass of 4 steel balls = $7.4 \text{ kg} - 3.92 \text{ kg}$
 $= 3.48 \text{ kg}$
Mass of each steel ball = $\frac{3.48 \text{ kg}}{4}$
 $= 0.87 \text{ kg}$
 $= 870 \text{ g}$

04. (B) Convert mixed numbers to improper fractions

$$3\frac{4}{5} = \frac{19}{5}, \quad 2\frac{7}{10} = \frac{27}{10}, \quad 4\frac{8}{15} = \frac{48}{15}$$

Find a common denominator (30)

$$\frac{19}{5} = \frac{114}{30}, \quad \frac{27}{10} = \frac{81}{30}, \quad \frac{68}{15} = \frac{136}{30}$$

$$\text{Total} = \frac{114 + 81 + 136}{30} = \frac{331}{30} = 11\frac{1}{30}$$

05. (C) Step 1 :

$$\text{Total spent} = 425.65 + 64.35 = \text{Rs. } 490.00$$

Step 2 :

$$\text{Money returned} = 500 - 490 = \text{Rs. } 10$$

06. (A) Since each of five friends paid an extra 3 to cover Lakshmi's portion of the bill, then Lakshmi's share was $5 \times \text{Rs. } 3 = \text{Rs. } 15$

Since each of the six friends had an equal share, then the total bill is $6 \times \text{Rs. } 15 = \text{Rs. } 90$.

07. (A) Full box (box + buttons) = 2 kg = 2000 g

$$\text{When } \frac{1}{3} \text{ full} \rightarrow \text{mass} = 800 \text{ g}$$

Let the mass of the empty box = B

and the mass of all buttons (when full) = C

So

$$B + C = 2000 \quad (1)$$

$$B + C = 800$$

Subtract (2) from (1)

$$(B + C) - (B + \frac{1}{3}C) = 2000 - 800$$

$$C - \frac{1}{3}C = 1200$$

$$\frac{2}{3}C = 1200$$

$$C = 1800$$

Now Substitute back

$$B + 1800 = 2000 \Rightarrow B = 200 \text{ g}$$

Mass of the box = 200 g

08. (A) Total money collected

$$= 40 \times ₹ 25.25 = ₹ 1010$$

$$\text{Remaining money} = \frac{7}{10} \times ₹ 1010$$

$$= ₹ 707$$

09. (B) Area of the room $12.5 \text{ m} \times 8 \text{ m} = 100 \text{ m}^2$

$$\text{square carpet} = 8 \text{ m} \times 8 \text{ m} = 64 \text{ sq.m}$$

$$\text{Uncovered area} = 100 - 64 = 36 \text{ sq.m}$$

10. (D) Area of bigger rectangle

$$= 28 \text{ cm} \times (12 + 8) \text{ cm} = 560 \text{ cm}^2$$

$$\text{Area of smaller rectangle} = 8 \text{ cm} \times (28 \text{ cm} - 9 \text{ cm} - 5 \text{ cm})$$

$$= 8 \text{ cm} \times 14 \text{ cm} = 112 \text{ cm}^2$$

$$\text{Area of shaded region} = 560 \text{ cm}^2 - 112 \text{ cm}^2 = 448 \text{ cm}^2$$

11. (B) Let no. of notes of ₹50 be x

$$\therefore \text{No. of notes of ₹10} = 2x$$

$$\therefore \text{No. of notes of ₹5} = 4x$$

$$\text{Amount of ₹50} = ₹50x$$

$$\text{Amount of ₹10} = ₹20x$$

$$\text{Amount of ₹5} = ₹20x$$

$$\text{Total money} = ₹50x + ₹20x + ₹20x = ₹90x$$

$$\text{Given } ₹90x = ₹1350$$

$$x = \frac{1350}{90} = 15$$

$$\text{Amount of ₹5} = ₹20x = ₹20 \times ₹15 = ₹300$$

12. (B) Given letters are having vertical line symmetry

13. (C) Pens per box

$$\frac{6000 \text{ pens}}{48 \text{ boxes}} = 125 \text{ pens / box}$$

Boxes for 1875 pens

$$\frac{1875 \text{ pens}}{125 \text{ pens / box}} = 15 \text{ boxes}$$

14. (A) Sum of three prime numbers is even then

Even + odd + odd result is even

$$\therefore \text{Smallest prime} = 2$$

15. (D) $42 = 1 \times 42$
 $= 2 \times 21$
 $= 3 \times 14$
 $= 6 \times 7$
 Multiples of 7: 7, 14, 21, 28, 35, 42....
 $7 + 14 + 21 + 42 = 84$

REASONING

16. (C) Bed : Quilt : Pillow
 A magazine contains items such as a story and an article — similarly a bed holds items such as a quilt and a pillow.
17. (D) The sequence is a combination of two series : I. 19, 38, 114, (....) II. 2, 3, 4 The pattern followed in I is $\times 2, \times 3, \dots$ Missing number $= 114 \times 4 = 456$.
18. (C) Let's decode the pattern from TOY $\rightarrow$ UQZ
 Compare each letter:
 T $\rightarrow$ U $\rightarrow +1$
 O $\rightarrow$ Q $\rightarrow +2$
 Y $\rightarrow$ Z $\rightarrow +1$
 So the pattern is : $+1, +2, +1$
 Now apply the same pattern to CAR:
 • C $\rightarrow$ D $(+1)$
 • A $\rightarrow$ C $(+2)$
 • R $\rightarrow$ S $(+1)$
 So, CAR becomes DCS
 Correct Answer : (C) DCS
19. (B) After discarding every alternate letters starting with 'Y' in alphabet written in reverse, we will get :
 Z X V T R P N L J H F D B
 Clearly, 'N' is the middle letter.



A circular badge has a two-digit number printed on it.

When this badge is placed in front of a mirror positioned vertically, the digits appear flipped.

21. (A) A symmetrical pattern with 4 triangular folds meeting at the center.

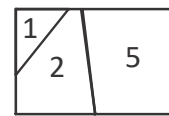
This matches the standard origami folding style used in the paper bird shown earlier.

The arrow directions suggest inward corner folds, which is typical in origami birds before shaping wings or tails.

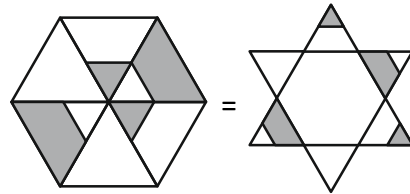
On unfolding, such folds create creases that radiate outward — exactly what is shown in Option (A).

Why other options are incorrect:

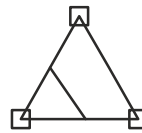
22. (B) Figures 1, 2 and 5 will form the rectangle as shown below :



23. (C)



24. (C)



Option (A) : Line touches side and corner. ()

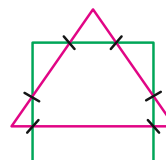
Option (B) : Squares are on back side. ()

Option (D) : Line touches corner and side. ()

25. (C) Except (C), in all other figures arrows are towards the circles.

26. (A) $(3 + 6) 2 + 1 = 19$

27. (C)

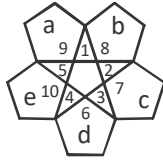


28. (A) The name of a game is 'APPLAUD'. The first and last letters are 'A' and 'D' respectively.

29. (A) The bird sat on the roof.

The hidden word is "HERO"

30. (B) 10 triangle – 6 pentagons
= 4 more triangles



COMPUTERS

31. (C) Watermark is the image or text that appears mainly behind the document.
32. (C) Transistors
Transistors replaced vacuum tubes in second-generation computers, making systems faster and smaller.
33. (C) PhonePe
Sameer Nigam is the founder of PhonePe, which is an Indian digital payment platform used for UPI, bill payments, and more.
34. (B) Access time
Access time is the total time required to retrieve data from a hard disk. It includes:
- Seek time (moving the read/write head),
 - Rotational delay (waiting for the disk to rotate to the correct position), and
 - Transfer time (actual data read/write).
35. (A) Taskbar – Displays the Start button, quick launch icons, and running programs.
36. (C) Grouping lets you treat multiple items as one unit. After grouping, you can drag them together to the center without affecting their position relative to each other.
37. (B) Right-click on a worksheet tab and select Insert
This is the standard method to add a new worksheet in Excel 2010. Right-clicking the sheet tab gives options like Insert, Delete, Rename, etc.
38. (C) CC sends a visible copy to the additional recipient.
39. (B) MICR Reader : Correct answer. Decodes magnetic ink characters unique to cheques.

40. (A) String = \$ (e.g., name\$)
Long = & (e.g., bigNum&)
Single = ! (e.g., decimal!)
Currency = @ (e.g., price@)
41. (B) MAC address (Correct Answer)
Stands for Media Access Control address
A unique hardware identifier assigned to your device's network adapter
Used for local network communication (within your home/school network)
Like a student ID number that's only used within your school
Permanent and burned into your device's hardware
42. (B) Utility software
Specialized tools that maintain/protect the computer system
Includes : antivirus, disk cleaners, backup tools, file compressors
Acts like a "doctor" for your computer rather than a "tool" for creating things
Runs automatically in background to monitor/protect
43. (B) Input/Output (Correct Answer)
Parallelograms specifically show data input or output
Examples: "Enter password" (input)
"Print report" (output)
Acts like a mailbox (receiving/sending information)
44. (B) The given logo is Wikipedia
45. (A) By enabling the option "Loop continuously until 'Esc'"

ENGLISH

46. (D) "Mind your p's and q's" means to be careful in behavior and speech.
47. (B) The correct sentence is : They didn't know whose books weren't returned. Three contractions need apostrophes.
48. (A) The completed word is MOMENTS. It fits the context of the sentence.
49. (C) Hospitality means being warm, welcoming, and friendly to guests.
- Coldness conveys an unfriendly or distant attitude, making it the opposite.
 - Cordiality and warmth are synonyms of hospitality.
 - Complaint is unrelated to hospitality's meaning but may distract students who misinterpret the sentence.
50. (A,D) The correct spelling is/are received, achievements.

===== *The End* =====